Commonwealth of Kentucky Environmental and Public Protection Cabinet Department for Environmental Protection Division for Air Quality

Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

Final

AIR QUALITY PERMIT Issued under 401 KAR 52:020

Permittee Name: E.I. Dupont De Nemours and Co.

Mailing Address: HC-66 400 Harris Road

Wurtland, KY 41144

Source Name: Same as above Mailing Address: Same as above

Source Location: HC-66 400 Harris Road

Wurtland, KY 41144

Permit Number: V-06-026 Source A. I. #: 1589

Activity #: APE20040001 Review Type: Title V, Operating Source ID #: 21-089-00001

Regional Office: Ashland

3700 13th **Street**

Ashland, Kentucky 41105

(606)920 -2067

County: Greenup

Application

Complete Date: April 4, 2004

Issuance Date: December 2, 2006

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John S. Lyons, Director Division for Air Quality

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	Permit type	Log or Activity#	Complete Date	Issuance Date	Summary of Action
V-03- 007	DRAFT Initial Issuance	50666	January 11, 2000	May 8, 2003	Redraft necessary
V-06- 026	Initial Issuance	APE20040001	April 4,2004	December 2, 2006	Initial source wide operating permit

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

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SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

01 (01) Sulfuric Acid Production Plant

Description: Equipment: Blower/turbine, dry tower, sulfur burner, boiler #1, converter, boiler #2,

superheater #1, superheater #2, economizer, oleum tower, absorbing tower.

Original Construction Date: 1961

Sulfur Burner Rated Capacity: 23 mmBTU/hr Boiler #1 Rated Capacity: 45.9 mmBTU/hr Boiler #2 Rated Capacity: 15.1 mmBTU/hr Superheater #1 Rated Capacity: 5.8 mmBTU/hr Superheater #2 Rated Capacity: 1.3 mmBTU/hr

Maximum Production Rate: 32.5 tons 100% sulfuric acid/hr

Control Equipment: Brinks Mist Eliminator

Control Efficiency: 95%

02 (02) Oleum Loading to Barges, Rail Cars, & Truck Trailers

<u>Description</u>: Equipment: Oleum storage tanks and oleum loading racks.

Construction Date: 1961

Maximum Production Rate: 32.5 tons 100% sulfuric acid/hr

Control Equipment: Brinks Scrubber

Control Efficiency: 99.8%

07 (07) Sulfuric Acid Bulk Storage Tanks

<u>Description</u>: Equipment: Three storage tanks for non-fuming sulfuric acid.

Construction Date: 1961

Maximum process rate: 32.5 tons 100% sulfuric acid/hr

Control Equipment: None

APPLICABLE REGULATIONS:

401 KAR 61:005, *General provisions*, applies to an existing source for which a standard of performance has been promulgated under this chapter.

401 KAR 61:015, *Existing Indirect Heat Exchangers*, applies to the particulate matter emissions from the sulfur burner (combustion of natural gas).

401 KAR 61:030, *Existing Sulfuric Acid Plants*, applies to sulfuric acid plants that commenced construction prior to August 17, 1971.

State-Origin Applicable Regulations:

401 KAR 63:021, Existing Sources Emitting Toxic Air Pollutants applies to sulfuric acid mist emissions.

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SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. **Operating Limitations**:

a. The production of Sulfuric Acid shall not exceed 260,000 tons 100% sulfuric acid per year based on a twelve (12) month rolling total [state-only requirement from permit O-91-007].

Compliance Demonstration Method:

The permittee shall monitor and maintain records of monthly and rolling twelve (12) month totals of sulfuric acid produced.

2. <u>Emission Limitations</u>:

a. No person shall cause, suffer, allow, or permit into the open air visible emissions which exhibit greater than twenty (20) percent opacity. [401 KAR 61:030, Section 3(2)]

Compliance Demonstration Method:

Weekly visual observations as specified in **3.Testing Requirements** and **5. Specific Record Keeping Requirements**.

b. No person shall cause, suffer, allow, or permit into the open air SO₂ emissions in excess of twenty-seven and six tenths (27.6) pounds per ton of acid produced, the production being expressed as 100 percent sulfuric acid. [401 KAR 61:030, Section 4]

Compliance Demonstration Method:

The permittee shall monitor and maintain records of SO₂ emissions as specified in **4. Specific Monitoring Requirements** and **5. Specific Record Keeping Requirements**. The 27.6 lb/ton acid produced shall be based on 3-hour rolling average.

c. Emissions of Sulfuric Acid Mist shall not exceed the following limits:

Emission Point	H ₂ SO ₄ mist (lbs/ton of acid produced) 401 KAR 63:030, Section 3	H ₂ SO ₄ mist (lbs/hr) State-only requirement from O-91-007 401 KAR 63:021
01	0.5	9.289
02	0.5	0.149
07	0.5	0.0066

Compliance Demonstration Method:

Calculate emissions of sulfuric acid mist on a monthly basis using the following emission factors and total them on a twelve (12) month rolling total, until stack testing and new emission factors and/or control efficiencies are determined and approved by the Division for Air Quality.

Emission	Emission Factor H ₂ SO ₄ mist	Control Efficiency
Point	(lb/ton 100% acid)	(%)
01	4.2	95.0
02	0.875	99.8
07	2 x 10 ⁻⁶	-

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SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

d. Emissions of particulate matter from the sulfur burner, boilers #1 and 2, superheaters #1 and 2 shall not exceed 0.33 lb/mmBTU. [401 KAR 61:015, Section 4(1)]

Compliance Demonstration Method:

The permittee shall use the following formula to calculate emissions:

PM emissions = [(N (lb/mmBTU) Er

[(Monthly fuel consumption rate x Emission factor listed in Kentucky Emissions Inventory) / (Hours of operation per month x Hourly Rated Capacity)]

3. <u>Testing Requirements</u>:

- a. The permittee shall perform a qualitative visible observation of the opacity of emissions on a weekly basis and maintain a log of the observation. If visible emissions are seen, the opacity shall be determined by EPA Reference Method 9. If Method 9 indicates emissions in excess of the standard, then an inspection shall be initiated for any necessary repairs. If a Method 9 test cannot be performed, the reason for not performing the test shall be documented.
- b. Within 180 days after issuance of the final permit V-06-026, and pursuant to 401 KAR 61:030 section 5:
 - i. The reference methods as defined in Appendix A of 40 CFR 60, adopted by reference in 401 KAR 50:015, except as provided in 401 KAR 50:045, shall be used to determine compliance with the standards prescribed above:
 - (a) Reference Method 8 for the concentrations of sulfur dioxide and acid mist;
 - (b) Reference Method 1 for sample and velocity traverses;
 - (c) Reference Method 2 for velocity and volumetric flow rate; and
 - (d) Reference Method 3 for gas analysis.
 - ii. The moisture content can be considered to be zero. For Reference Method 8, the sampling time for each run shall be at least sixty (60) minutes and the minimum sample volume shall be 1.15 dscm (forty and six-tenths (40.6) dscf) except that smaller sampling times or sample volumes, when necessitated by process variables or other factors, may be approved by the cabinet.
 - iii. Acid production rate, expressed in metric tons per hour of 100 percent sulfuric acid shall be determined during each testing period by suitable methods and shall be confirmed by a material balance over the production system.
 - iv. Acid mist and sulfur dioxide emissions, expressed in g/metric ton of 100 percent sulfuric acid shall be determined by dividing the emission rate in g/hr by the acid production rate. The emission rate shall be determined by the equation g/hr = (QS)(c), where QS = volumetric flow rate of the effluent in dscm/hr as determined in accordance with subsection (1)(c) of this section and c = acid mist and sulfur dioxide concentrations in g/dscm as determined in accordance with 401 KAR Section 5 (1)(a).

4. Specific Monitoring Requirements:

a. Pursuant to 401 KAR 61:005, Section 3(1) and Section 3(2)(b), the owner or operator of shall continuously monitor sulfur dioxide (SO₂) emissions.

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SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. Pursuant to 401 KAR 61:005, Section 3(6)(b) and Section 3(7)(b), for the measurement of SO₂, the owner or operator shall install, calibrate, maintain, and operate a continuous monitoring system (CMS) that shall comply with the Performance Specification 2 of Appendix B to 40 CFR 60 except as provided in Section 3(8).

5. Specific Recordkeeping Requirements:

- a. Retain records of the results of the weekly visual observations. The records shall include the date of the observation, and whether any visible emissions were observed. If a visual observation was not performed, the reason for not performing it shall also be recorded. If visible emissions are observed, then the following additional records shall be retained:
 - i. The actions taken to correct the problem, and result of the subsequent visual observation showing no visible emissions, or
 - ii. The results of the Reference Method 9 opacity test.
- b. The permittee shall maintain records of the CMS data and the number of excursions, time and date of excursions, value of excursions and percentage of CMS data showing excursions in each calendar quarter.
- c. The permittee shall keep records of SO₂ emissions per ton of acid produced, the production being expressed as 100 percent sulfuric acid.
- d. The permittee shall keep records of emissions of sulfuric acid mists calculations.

6. Specific Reporting Requirements:

None

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

None

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SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

04 (04) Chlorosulfonic Acid Reactor

<u>Description</u>: Equipment: A-HC vaporizer, A-HCl superheater, glycol heater, glycol hold tank,

glycol pump, absorber, separator, CSA-SO₃ mixing, eductor, finished product cooler,

reactor cooler, reactor pump, pump out pump, #7 and #8 CSA storages.

Construction Date: 1990

Maximum Rated Capacity: 38693 tons 100% sulfuric acid

Control Equipment: Fume Abatement System Control Efficiency: 99.8% (H₂SO₄); 90.0% (HCl)

05 (05) Chlorosulfonic Acid Storage Tanks

<u>Description</u>: Equipment: Two CSA storage tanks.

Construction Date: 1990

Maximum Capacity: 13,000 gallons each Control Equipment: Fume Abatement System Control Efficiency: 99.8% (H₂SO₄); 90.0% (HCl)

06 (B) Chlorosulfonic Acid Loading Facility

<u>Description</u>: Equipment: CSA storage tanks and six loading racks.

Construction Date: 1990

Maximum Production Rate: 32.5 tons 100% sulfuric acid/hr

Control Equipment: Fume Abatement System Control Efficiency: 99.8% (H₂SO₄); 90.0% (HCl)

09 (09) Chlorosulfonic Acid / Sulfur Trioxide Blend Reactor

Equipment: Glass reactor vessel, eductor.

Construction Date: April 30, 1994

Maximum Production Rate: 6022 tons 100% sulfuric acid/year

Control Equipment: Fume Abatement System Control Efficiency: 99.8% (H₂SO₄); 90.0% (HCl)

10 (10) Pipeline Equipment (related to CSA/SO₃ Blend Reactor)

Equipment: Pipeline with 32 liquid valves, 1 pump seal, and 92 liquid flanges.

Construction Date: April 30, 1994

Maximum Production Rate: 6022 tons 100% sulfuric acid/year

Control Equipment: NA

APPLICABLE REGULATIONS:

401 KAR 59:010, New Process Operations, applies to particulate matter emissions.

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applies to HCl emissions. *State-Origin Applicable Regulations*:

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SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 63:022, New or Modified Sources Emitting Toxic Air Pollutants, applies to sulfuric acid mist emissions.

1. Operating Limitations:

Pursuant to 401 KAR 63:020 Section 3, No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

Compliance Demonstration Method:

Compliance with the operating limitation is demonstrated as long as control devices are operational in compliance with **7. Specific Control Equipment Operating Conditions**. In the event the control equipment is shut down for any extended period or at any other time, the Division may request a further compliance demonstration.

2. Emission Limitations:

a. No person shall cause, suffer, allow, or permit into the open air visible emissions which exhibit greater than twenty (20) percent opacity [401 KAR 59:010, Section 3(1)].

Compliance Demonstration Method:

Weekly visual observations as specified in **3. Testing Requirements** and **5. Specific Record Keeping Requirements**.

b. Emissions of sulfuric acid mist, hydrochloric acid mist, and particulate matter (including sulfuric acid mist and hydrochloric acid mist) shall not exceed the following limits:

	Particulate Matter	H ₂ SO ₄ mist (lbs/hr)	HCl mist (lbs/hr)
Emission	(including H ₂ SO ₄ and	State-only requirement	State-only requirement
Point	HCl mist) (lbs/hr)	from O-91-007, S-94-061	from O-91-007, S-94-061
	401 KAR 59:010	401 KAR 63:021	401 KAR 63:021
04	9.1	0.378	0.717
05	9.1	0.011	0.056
06	9.1	0.075	0.385
09/10	2.87	3.871	0.933

Compliance Demonstration Method:

Calculate emissions of sulfuric acid mist, hydrochloric acid mist, and particulate matter (including sulfuric acid mist and hydrochloric acid mist) on a monthly basis using the following emission factors and total them on a twelve (12) month rolling average, where:

Emissions (lbs/hr) = Rate [(ton of 100% acid/month) / Hours of operation per month] x Emission Factor (lbs/ton of 100% acid) x (1 – Control Efficiency)

Use CSA rate for EP 04, 05, and 06 and CSA/SO₃ rate for EP 09.

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SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Point	Emission Factor PM (lb/ton 100% acid)	Emission Factor H ₂ SO ₄ mist (lb/ton 100% acid)	Emission Factor HCl mist (lb/ton 100% acid)	Control Efficiency (%)
04	0.210	0.153	0.0566	99.8 (H ₂ SO ₄) 90.0 (HCl)
05	0.0821	0.0598	0.0223	99.8 (H ₂ SO ₄) 90.0 (HCl)
06	0.081	0.0593	0.0221	99.8 (H ₂ SO ₄) 90.0 (HCl)
09	0.151	0.0588	0.0926	99.8 (H ₂ SO ₄) 90.0 (HCl)

3. <u>Testing Requirements</u>:

The permittee shall perform a qualitative visible observation of the opacity of emissions on a weekly basis and maintain a log of the observation. If visible emissions are seen, then the opacity shall be determined by EPA Reference Method 9. If Method 9 indicates emissions in excess of the standard, then an inspection shall be initiated for any necessary repairs. If a Method 9 test cannot be performed, the reason for not performing the test shall be documented.

4. Specific Monitoring Requirements:

None

5. Specific Recordkeeping Requirements:

- a. Retain records of the results of the weekly visual observations. The records shall include the date of the observation, and whether any visible emissions were observed. If a visual observation was not performed, the reason for not performing it shall also be recorded. If visible emissions are observed, then the following additional records shall be retained:
 - i. The actions taken to correct the problem, and result of the subsequent visual observation showing no visible emissions, or
 - ii. The results of the Reference Method 9 opacity test.
- b. The permittee shall keep records of emissions of sulfuric acid mists calculations.

6. Specific Reporting Requirements:

None

7. Specific Control Equipment Operating Conditions:

The control devices shall be operating at all times the listed emission points are in use.

8. Alternate Operating Scenarios:

None

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SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (03) Emergency Boiler

Description: Construction Date: 1990

Primary fuel: Natural Gas Backup fuel: Fuel Oil #2

Maximum rated capacity: 29.25 mmBTU/hr

APPLICABLE REGULATIONS:

401 KAR 61:015, *Existing Indirect Heat Exchangers*, applies to the particulate matter and sulfur dioxide emissions from the combustion of natural gas and fuel oil.

1. **Operating Limitations:**

None

2. Emission Limitations:

a. Pursuant to 401 KAR 61:015, Section 4(1), emissions of particulate matter from the combustion of either natural gas or fuel oil shall not exceed 0.38 lb/mmBTU.

Compliance Demonstration Method:

Compliance with the particulate matter limit is demonstrated when burning natural gas or fuel oil # 2.

b. Pursuant to 401 KAR 61:015, Section 4(2), the opacity of visible emissions from the combustion of either natural gas or fuel oil shall not exceed 20%.

Compliance Demonstration Method:

- While burning only natural gas the permittee shall be deemed to be in compliance with the applicable emission standards.
- When burning No. 2 fuel oil, see **3. Testing requirements**, and **5. Specific Record Keeping Requirements** below.
- c. Pursuant to 401 KAR 61:015, Section 5, emissions of sulfur dioxide from the combustion of either natural gas or fuel oil shall not exceed 4.9 lb/mmBTU.

Compliance Demonstration Method:

Compliance with the sulfur dioxide limit is demonstrated when burning natural gas. When burning fuel oil, the sulfur emission shall be less than the allowable, based on:

Sulfur (lb/mmBTU) = 142 S (lbs/ 10^3 gal) x (10^3 gal /140 mmBTU)

Where S = weight % of sulfur in the fuel oil.

Refer to **4. Specific Monitoring Requirements** for the sulfur content of the fuel.

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SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Testing Requirements:

When burning No. 2 fuel oil, the permittee shall perform a qualitative visible observation of the opacity of emissions on a weekly basis and maintain a log of the observation. If visible emissions are seen, then the opacity shall be determined by EPA Reference Method 9. If Method 9 indicates emissions in excess of the standard, then an inspection shall be initiated for any necessary repairs. If a Method 9 test cannot be performed, the reason for not performing the test shall be documented.

4. **Specific Monitoring Requirements:**

The permittee shall monitor and maintain records of the sulfur content of fuel oil #2. The sulfur content may be determined by fuel sampling and analysis or by fuel supplier certification.

5. Specific Record keeping Requirements:

- a. See **4. Specific Monitoring Requirements** above.
- b. Retain records of the results of the weekly visual observations. The records shall include the date of the observation, and whether any visible emissions were observed. If a visual observation was not performed, the reason for not performing it shall also be recorded. If visible emissions are observed, then the following additional records shall be retained:
 - i. The actions taken to correct the problem, and result of the subsequent visual observation showing no visible emissions, or
 - ii. The results of the Reference Method 9 opacity test.

6. Specific Reporting Requirements:

None

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

None

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SECTION C – INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	<u>Description</u>	Generally Applicable Regulation
1.	Chlorosulfonic Acid Tank #3. 210,000 gallons	401 KAR 59:010
2.	Emergency Generators (2 Generators @ 1.82 mmBTU per hour each)	401 KAR 59:010
3.	Dimethyl Phtalate Addition 200 gallons	401 KAR 63:020
4.	Sulfur Trioxide Loading Spots 7200 gallons/hr	401 KAR 63:020
5.	Molten Sulfur Storage Tank 186,000 lbs/hr	None
6.	Molten Sulfur Unloading Spot and Storage Pits 186,000 lbs/hr	None
7.	Fuel Storage Tank – Gasoline 213061 gallons/year	None
8.	Fuel Storage Tank – Diesel 1576800 gallons/year	None
9.	Sulfuric Acid Loading 150 ton/hr	None
10.	Ethylene Glycol Heating System 100 gallons	401 KAR 63:020
11.	Pipeline Equipment (fugitive emissions)	None

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SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

- 1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
- 2. PM, SO₂, H₂SO₄ mist, and HCl mist, emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
- 3. Pursuant to 401 KAR 53:010 Appendix A, the following standards shall apply for source-wide emissions:

For SO_2 :

- i. The annual arithmetic mean shall not exceed 80 μg/m³;
- ii. The maximum twenty-four (24) hour average shall not exceed 365 $\mu g/m^3$ more than once per year; and
- iii. The maximum three (3) hour average shall not exceed 1300 $\mu g/m^3$ more than once per year.

For PM_{10} (including H_2SO_4):

- i. The annual arithmetic mean shall not exceed 50 $\mu g/m^3$;
- ii. The maximum twenty-four (24) hour average shall not exceed $150\,\mu\text{g/m}^3$ more than once per year.

Compliance Demonstration Method:

The facility shall perform modeling to show compliance with the following:

- 1) the annual arithmetic mean for SO_2 ;
- 2) the maximum twenty four (24) hour average for SO₂;
- 3) the maximum three (3) hour average for SO₂; and
- 4) the maximum twenty four (24) hour average for PM₁₀, as listed in 401 53:010 Appendix A.

Modeling for potential emissions shall be performed within 60 days after the proposed permit V-06-026 is issued, and submitted to the Division. If the results exceed the standards in 401 KAR 53:010, modeling for actual emissions shall be performed by March 30 of every year after issuance of the proposed permit V-06-026, for the previous calendar year emissions.

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SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

- 1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V*Permits incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit:
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- 6. The semi-annual reports are due by January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the Cabinet Provisions and Procedures for *Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
 - f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

Division for Air Quality Ashland Regional Office 1550 Wolohan Drive, Ste. 1 Ashland, KY 41102 U.S. EPA Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth St. Atlanta, GA 30303-8960

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

- 10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
- 11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

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SECTION G – GENERAL PROVISIONS

(a) <u>General Compliance Requirements</u>

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12:
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- 4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

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SECTION G – GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

- 7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
- 11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
- 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
- 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
- 15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

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SECTION G – GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:

- a. Applicable requirements that are included and specifically identified in the permit and
- b. Non-applicable requirements expressly identified in this permit.
- 17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

(b) Permit Expiration and Reapplication Requirements

- 1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- 2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

- 1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.
- (d) <u>Construction, Start-Up, and Initial Compliance Demonstration Requirements</u>

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SECTION G – GENERAL PROVISIONS (CONTINUED)

No construction authorized by this permit

(e) <u>Acid Rain Program Requirements</u>

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) <u>Emergency Provisions</u>

- 1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - e. This requirement does not relieve the source of other local, state or federal notification requirements.
- 2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- 3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 3346 Merrifield, VA, 22116-3346 Permit Number: <u>V-06-026</u> Page: <u>21</u> of 22

SECTION G – GENERAL PROVISIONS (CONTINUED)

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

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SECTION H – ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None